

**BEFORE**  
**THE PUBLIC SERVICE COMMISSION OF**  
**SOUTH CAROLINA**

**DOCKET NO. 2019-224-E**  
**DOCKET NO. 2019-225-E**

In the Matter of:	)	<b>DUKE ENERGY CAROLINAS,</b>
	)	<b>LLC’S AND DUKE ENERGY</b>
South Carolina Energy Freedom Act	)	<b>PROGRESS, LLC’S FIRST SET</b>
(House Bill 3659) Proceeding Related to	)	<b>OF REQUESTS FOR</b>
S.C. Code Ann. Section 58-37-40 and	)	<b>PRODUCTION OF DOCUMENTS</b>
Integrated Resource Plans for Duke	)	<b>AND INTERROGATORIES TO</b>
Energy Carolinas, LLC and Duke Energy	)	<b>SOUTH CAROLINA OFFICE OF</b>
Progress, LLC	)	<b>REGULATORY STAFF</b>
	)	

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Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”) (together, “Duke Energy” or the “Companies”), by and through their legal counsel, pursuant to Rule 103-833(C) of the Rules of Practice and Procedure of the Public Service Commission of South Carolina, hereby serve the South Carolina Office Regulatory Staff (“ORS”) with the following First Set of Requests for Production and Interrogatories to be answered under oath on or before twenty (20) days from the date of service.

Further, please take notice that these Requests for Production and Interrogatories are continuing in nature until the date of the hearing, and that any information or responsive materials identified after your responses have been served upon the undersigned counsel should be provided via supplemental discovery responses as soon as possible after such identification.

## **INSTRUCTIONS**

1. Please produce the requested documents as they are kept in the usual course of business or to organize and label them to correspond with the categories in the Request. Documents attached to each other should not be separated.

2. In producing Documents, furnish all documents known or available to you, regardless of whether such documents are possessed directly by you or your agents, employees, representatives, investigators, or by your attorneys. All requests for Documents specifically request documents of the South Carolina Office of Regulatory Staff, as well as J. Kennedy and Associates, Inc., Stephen J. Baron, Philip Hayet, and Lane Kollen, who you have retained to provide expert testimony in this proceeding.

3. If any document otherwise responsive to any Request was, but is no longer, in your possession, subject to your control or in existence, identify each document by listing its author(s) and addressee(s), date, subject matter, whether the document(s) or copies are still in existence (and if so, their locations and the custodians), as well as whether the document is missing or lost, has been destroyed, has been transferred voluntarily to others, or has been otherwise disposed of. In each instance, explain the circumstances surrounding such disposition and identify the person(s) directing or authorizing its destruction or transfer, and the date(s) of such direction or authorization.

4. If a privilege or objection as to any Request is claimed, identify with specificity the matter as to which the privilege or objection is claimed, the nature of the privilege or objection, and the legal and factual basis for each such claim, and provide a complete description of the information or document being withheld.

5. Unless otherwise stated, the relevant time period for these Requests is from January 1, 2018, until the present.

6. Each Request shall be reproduced at the beginning of the response thereto.

7. Please provide copies of the information responsive to each Request in native electronic working format with all data and formulas intact.

8. Please provide responses to the following data requests electronically. To the extent this is impracticable, the responses, including any responsive Documents, should be provided at the offices of Robinson, Gray, Stepp & Laffitte, LLC, 1310 Gadsden Street, Columbia, South Carolina 29201, or some mutually convenient location otherwise agreed to by the parties.

### **DEFINITIONS**

1. **“Commission”** means the Public Service Commission of South Carolina.

2. **“Communication”** means the transmittal of information in the form of facts, ideas, Documents, inquiries, or otherwise, including every discussion, conversation, conference, or telephone call.

3. **“You”** and **“your”** means the South Carolina Office of Regulatory Staff (“ORS”), South Carolina Office of Regulatory Staff’s witnesses in this proceeding, including but not limited to, Anthony M. Sandonato, and retained witnesses from J. Kennedy and Associates, Inc., and all of its members, agents, representatives and attorneys.

4. **“Dockets”** means Commission Docket Nos. 2019-224-E & 2019-225-E.

5. The term **“document”** is to be construed as broadly as permissible under Rule 34 of the South Carolina Rules of Civil Procedure and includes, but is not limited to, any printed, typewritten, handwritten or otherwise recorded information of whatever character, including, but not limited to, letters, memoranda, notes, diaries, reports, records,

calendars, charts, audio and/or video tapes or discs, and photographs; computer programs or disks; electronic media records, however recorded and maintained, including, but not limited to, electronic mail, voicemail messages, digital photographs and electronically scanned records of any type; recorded observations, statements, conversations or formal affidavits. Any carbon or photocopy of any such materials upon which notations have been made and all drafts are also included.

6. **“Person”** means any natural person or any business, legal, or governmental entity or association.

7. The terms **“related to”** and **“relating to”** or any variation thereof shall be construed to include refer to, summarize, reflect, constitute, contain, embody, mention, show, comprise, evidence, discuss, describe, comment on, concerning, regarding, eluding to, pertaining to, probative of, in connection with, dealing with, in respect of, about, involved, identifying or proving.

8. **“Identify,”** when referring to a Person, means to give, to the extent known, the Person’s full name, present or last known address, and when referring to a natural Person, additionally, the present or last known place of employment.

9. **“Identify,”** when referring to Documents, means to give, to the extent known, the (i) type of Document; (ii) general subject matter; (iii) date of the Document; and (iv) authors addressees and recipients.

10. **“Identify,”** when referring to an oral Communication, means to give, to the extent known, the identity of the speaker and of each Person who was present when the Communication was spoken, and the substance, date, and place of such Communication.

11. **“Integrated Resource Plans” or “IRPs”** refers to DEC’s and DEP’s respective integrated resource plans filed with the Public Service Commission of South Carolina in the Dockets on September 1, 2020.

### **INTERROGATORIES**

#### **Mr. Philip Hayet, J. Kennedy and Associates, Inc.**

1-1. Referring to Mr. Hayet’s recommendation beginning at Page 15, Line 17, as well as Page 5 of Mr. Anthony M. Sandonato’s testimony, Page 9 of Exhibit AMS-1, and Page 9 of Exhibit AMS-2, that the Commission require Duke Energy to include “additional detail” in future IRP filings regarding its nuclear relicensing plans, including by supplying “a timeline outlining its schedule for subsequent relicensing of all of its nuclear units, discuss[ing] the costs it anticipates will be incurred to relicense the units, and provid[ing] details of its plan to conduct economic evaluations to assess the benefits of subsequent relicensing the units[,]” please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to nuclear relicensing plans; and (ii) whether it would be reasonable to include such description in testimony in this proceeding versus a modified IRP.

#### **ANSWER:**

1-2. Referring to Mr. Hayet’s statement beginning at Page 22, Line 7 of his testimony, that he found it difficult to “identify all of the resources that were counted in the Companies’ LCR tables and to reconcile renewable resources in that table with resources that were modeled in PROSYM[,]” please explain the nature of the difficulty and

provide a list of the resources Mr. Hayet contends could not be reconciled between the Companies' LCR tables and the PROSYM model.

**ANSWER:**

1-3. Referring to Mr. Hayet's statement beginning at Page 22, Line 9 of his testimony, that "some of the tables, figures and discovery responses contain results that do not appear to match[,]" please identify any and all tables, figures, and specific discovery requests that Mr. Hayet contends do not reconcile with each other as well as the name of the document and specific data element(s) at issue.

**ANSWER:**

**Mr. Lane Kollen, J. Kennedy and Associates, Inc.**

1-4. Referring to Mr. Kollen's statement beginning at Page 7, Line 2 of his testimony, please explain the basis for his claim that "[t]he Companies assumed capital cost for solar resources is higher than was found in other sources that were available and this may have affected the amount of solar selected economically had the cost been lower and more consistent with the other sources." In your response, please identify any publications, studies, or other works that informed Mr. Kollen's statement

**ANSWER:**

1-5. Referring to Mr. Kollen's testimony beginning at Page 7, Line 19, please identify with specificity the "post in-service capital costs" for new battery resources that Mr. Kollen contends were not part of the Companies' analyses.

**ANSWER:**

1-6. Referring to Mr. Kollen's testimony beginning at Page 9, Line 3, please describe the methodology Mr. Kollen used to perform the Minimax Regret Analysis, including by providing a list of all inputs used in the analysis.

**ANSWER:**

1-7. Referring to Mr. Kollen's testimony beginning at Page 9, Line 3, please identify any other State Public Service Commissions or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to develop or provide a similar the Minimax Regret Analysis as part of their integrated resource planning process.

**ANSWER:****Mr. Anthony Sandonato, South Carolina Office of Regulatory Staff**

1-8. Referring to your recommendation #1 beginning at Page 7 of Exhibit AMS-1 and Page 7 of Exhibit AMS-2, that in future IRPs, the Commission should require the Company to "provide a technical appendix that describes in detail each of the models, presents the statistical results and shows the individual energy and peak load forecast results that were actually developed[.]" please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to its load and energy forecasting models; and (ii) an example of the type of technical appendix that ORS is recommending, as developed by another utility.

**ANSWER:**

1-9. Referring to your recommendation #2 beginning at Page 7 of Exhibit AMS-1 and Page 7 of Exhibit AMS-2, as well as Pages 5 & 8 of Mr. Stephen J. Baron's testimony, that in future IRPs, the Commission should require the Company to provide a detailed discussion of the methodology used to develop the synthetic loads for extreme low temperature periods[, including] detail regarding how the analysis was conducted or what specific additional adjustments were made to the load data at extreme low temperatures[.]" please identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to methodology used to determine resource adequacy.

**ANSWER:**

1-10. Referring to your recommendation #3 beginning at Page 7 of Exhibit AMS-1 and Page 7 of Exhibit AMS-2, that in a future IRP stakeholder process, the Commission should require the Company to "further develop its methodology to model the effects of extreme low temperatures on winter peak load" and your claim that "there may be alternative methodologies that the Company could consider to develop its synthetic loads in hours in which the temperatures fall significantly below the temperatures experienced during the weather/load estimation period[.]" please identify:



- a. Any “alternative methodologies” you contend the Companies should consider to address such outlying, low temperatures in their resource adequacy models; and
- b. Any other State Public Service Commission (by order or docket number) that requires utilities to model for temperatures that fall significantly below the temperatures experienced during the weather/load estimation period.

**ANSWER:**

1-11. Referring to your recommendation #4 beginning at Page 7 of Exhibit AMS-1 and Page 7 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, a detailed discussion “that explains how the results of the Astrape . . . 2018 Solar Capacity Value Study were used to derive the assumed winter peak standalone solar photovoltaic (“solar”) capacity value of 1%[,]” please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to methodology used to determine assumed winter peak solar capacity value and (ii) whether it would be reasonable to include such description in testimony in this proceeding versus a modified IRP.

**ANSWER:**

1-12. Referring to your recommendation #5 beginning at Page 8 of Exhibit AMS-1 and Page 8 of Exhibit AMS-2, that the Commission should require the Company to

provide, in a modified IRP in this proceeding, detailed “justification for selecting the Base EE/DSM case as opposed to the High EE/DSM case for use in Portfolio A[,]” please (i) identify whether any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide such detailed justification EE/DSM election; (ii) identify whether it would be reasonable to include such description in testimony in this proceeding versus a modified IRP; and (iii) explain in detail whether, for purposes of an IRP, customers would benefit from selecting a higher-than-supportable EE/DSM case.

**ANSWER:**

1-13. Referring to your recommendation #6 beginning at Page 8 of Exhibit AMS-1 and Page 8 of Exhibit AMS-2, that the Commission should require the Company to evaluate high and low levels of EE/DSM using high fuel/CO<sub>2</sub> and low fuel/CO<sub>2</sub> assumptions[,]” please identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to evaluate EE/DSM using both high fuel and low fuel assumptions and please explain in detail the rationale supporting the asserted connection between the levels utilized for EE/DSM savings in combination with fuel and CO<sub>2</sub> assumptions.

**ANSWER:**

1-14. Referring to your recommendation #9 beginning at Page 8 of Exhibit AMS-1 and Page 8 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “tables summarizing the capital and

operations and maintenance (“O&M”) costs for compliance with environmental regulations by unit and by environmental regulations, and include descriptions explaining those costs[.]” please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to compliance with environmental regulations; and (ii) an example of the type of table that ORS is recommending., as developed by another utility.

**ANSWER:**

1-15. Referring to your recommendation #10 beginning at Page 8 of Exhibit AMS-1 and Page 8 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “a cross reference table that compares each resource modeled in PROSYM, including generating units, demand response, purchase contracts, sales contracts, EE, etc. to the corresponding data in the Load, Capacity, and Reserves tables, on a resource by resource basis[.]” please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to system resources modeled in PROSYM and (ii) an example of the type of cross reference table that ORS is recommending, as developed by another utility.

**ANSWER:**

1-16. Referring to your recommendation #12 beginning at Page 9 of Exhibit AMS-1 that the Commission should require the Company to provide, in a modified IRP in this proceeding, “the status of its plans to relicense the [Bad Creek Pumped Hydro] units, including any actions it will have to take as part of the relicensing process and any costs that it will incur to relicense the units” please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to hydroelectric generating facility relicensing plans; and (ii) whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-17. Referring to your recommendation #13 beginning at Page 9 of Exhibit AMS-1, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “additional clarification regarding its plans for the retirement of the Allen units, including details about any transmission impacts, an explanation of the steps being pursued to receive final approval within DEC and from any regulatory body, and a timeline for conducting these activities [,]” please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to generating facility retirement plans; and (ii) whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-18. Referring to your recommendation #13 beginning at Page 9 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “additional clarification regarding its plans for the retirement of the Darlington CT units, including details about any transmission impacts[,]” please identify whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-19. Referring to your recommendation #14 beginning at Page 9 of Exhibit AMS-1 and Page 9 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “evidence that the optimal retirement dates that were determined with the Sequential Peaker Method are comparable to the optimal retirement dates the System Optimizer model would produce if it were used in the retirement study[,]” please identify

- a. any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to methodology used to determine assumed retirement dates;
- b. any other utilities of which you are aware that have used the System Optimizer to conduct analysis regarding retirement of multiple coal

units, stating the size of the coal fleet evaluated, and providing the utility's analysis;

- c. whether you believe there to be an industry standard methodology for coal retirement analysis, and, if so, explain your answer in detail; and
- d. whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-20. Referring to your recommendation #15 beginning at Page 9 of Exhibit AMS-1 and Page 9 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, "additional information explaining the basis for how combined heat and power ("CHP") resources were added to the short-term action plan and explain why CHP resources were not treated as selectable resources in the economic optimization process, if in fact they were not[,] please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to justify a decision not to treat CHP resources as selectable resources; (ii) any other utilities of which you are aware that treat CHP resources as either selectable resources or forced resources in the economic optimization process; and (iii) whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-21. Referring to your recommendation #16 beginning at Page 9 of Exhibit AMS-1 and Page 9 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “additional justification for its Combustion Turbine (“CT”) capital cost assumption[,]” please (i) explain the type of detail requested; (ii) identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to its CT capital cost assumption; and (iii) whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-22. Referring to your recommendation #17 beginning at Page 9 of Exhibit AMS-1 and Page 9 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “additional justification for its Battery Energy Storage fixed O&M cost and capacity factor assumptions[,]” please (i) explain with more specificity the type of detail requested; (ii) identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to O&M cost and capacity factor assumptions; and (iii) identify whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-23. Referring to your recommendation #18 beginning at Page 10 of Exhibit AMS-1 and Page 10 of Exhibit AMS-2, as well as Page 19 of Mr. Hayet's testimony, that the Commission should require the Company to provide, in a modified IRP in this proceeding, "an additional solar generic resource option in its IRP modeling assumptions that reflects the kind of solar purchase power agreements ("PPA") prices that may be available in the market[,]" please:

- a. Identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to conduct IRP modeling that reflects solar PPAs as a separate generic resource option;
- b. How ORS is proposing the Companies model PPAs for resource planning purposes (i.e., as capacity or energy resources? Fixed/escalating/declining price over a specified term?); and
- c. Whether the ORS supports the Companies procuring new fixed-price long-term obligations for capacity and energy in years, where the Companies have no demonstrated capacity need; and if so, does the ORS agree that the Companies should procure only least cost energy resources, regardless of technology, absent a technology- or resource-specific mandate to meet a legislative or regulatory requirement.

**ANSWER:**



1-24. Referring to your recommendation #19 beginning at Page 10 of Exhibit AMS-1 and Page 10 of Exhibit AMS-2, as well as Page 20 of Mr. Hayet's testimony, that the Commission should require the Company to investigate, in a future IRP stakeholder proceeding, "to assess the impact on the Company's base case resource plan if higher winter capacity value ratings were assumed such as 5% for solar and 30% for solar plus battery energy storage[,]" please identify:

- a. Any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to assume alternative capacity value assumptions for a single resource type that does not reflect the utility's experience and expectations of the resource's future capacity value; and
- b. The reason for selecting 5% and 30% as winter capacity value ratings benchmarks, including identifying any studies using those numbers.

**ANSWER:**

1-25. Referring to your recommendation #20 beginning at Page 10 of Exhibit AMS-1 and Page 10 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, "a table identifying each renewable resource option that was modeled, and include whether the resource was forced-in or economically selected . . . , the reason the resource was forced-in . . . , whether the resource is a designated, mandated, or undesignated resource, and where the resource is found in the PROSYM database and in the LCR tables for reconciliation purposes[,]" please identify (i)

any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide a similar level of detail in IRP filings with respect to modeling of renewable resource options; and (ii) an example of the type of table that ORS is recommending, as developed by another utility.

**ANSWER:**

1-26. Referring to your recommendation #21 beginning at Page 10 of Exhibit AMS-1 and Page 10 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “post in-service capital costs for new resource additions in its capital cost model and its Present Value of Revenue Requirement (“PVR”) calculations for each Portfolio and each sensitivity of each Portfolio[,]” please identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to include post in-service capital costs in its economic evaluation of portfolios and sensitivities.

**ANSWER:**

1-27. Referring to your recommendation #22 beginning at Page 10 of Exhibit AMS-1 and Page 10 of Exhibit AMS-2, that the Company should provide in this proceeding, “[t]he average retail rate impacts of Portfolios[,]” please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities provide similar analysis of average retail rate impacts as part of its integrated resource planning process; and (ii) provide an example of the type of analysis that ORS is recommending, as developed by another utility.

**ANSWER:**

1-28. Referring to your recommendation #23 beginning at Page 11 of Exhibit AMS-1 and Page 11 of Exhibit AMS-2, that the Commission should require the Company to revise, in a modified IRP in this proceeding, “the calculation of the average retail rate impact on customers so that the assumptions and methodologies are consistent with the calculations of the PVRR, except for the levelization of capital costs[,]” please identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to calculate its average retail rate impact in this way; and (ii) provide an example of the analysis that ORS is recommending, as developed by another utility .

**ANSWER:**

1-29. Referring to your recommendation # 24 beginning at Page 11 of Exhibit AMS-1 and Page 11 of Exhibit AMS-2, that the Commission should require the Company to provide, in a modified IRP in this proceeding, “additional details and status updates about resources included in the action plan, including coal retirements, the Lincoln CT project, unnamed energy storage projects, nuclear uprates, Bad Creek upgrades, and unnamed CHP projects[,]” please (i) explain the specific types of information requested; (ii) identify any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide such detail in its Action Plan; and (iii) whether it would be reasonable to provide the requested information in testimony in this proceeding versus through a future modified IRP.

**ANSWER:**

1-30. Referring to your recommendation #25 beginning at Page 11 of Exhibit AMS-1 and Page 11 of Exhibit AMS-2, as well as page 23 of Mr. Hayet's testimony, that the Commission should require the Company to provide, in a future IRP stakeholder proceeding, "details regarding the status of the SEEM, details regarding important current and planned activities, and information regarding the monetary benefits that have been or could be achieved by implementation of the SEEM[,]" please identify (i) any other State Public Service Commission or Regulatory Authority (by order or docket number) of which you are aware that requires utilities to provide such details regarding its implementation, or lack thereof, of its participation in an RTO, energy imbalance market or SEEM; and (ii) provide an example of the type of analysis that ORS is recommending, as developed by another utility .

**ANSWER:**

1-31. As provided in the instructions to these Interrogatories, if a privilege or objection as to any Request is claimed, identify with specificity the matter as to which the privilege or objection is claimed, the nature of the privilege or objection, the legal and factual basis for each such claim, and a complete description of the information or document being withheld.

**ANSWER:**

**REQUESTS FOR PRODUCTION**

1-1. Please produce copies of all data requests, requests for production, interrogatories, or other communications that have been received by ORS in connection with this docket. Please produce these as soon as practicable after they are received. Please consider this an ongoing request.

**RESPONSE:**

1-2. Please produce copies of ORS's responses to all data requests, requests for production, interrogatories, or any other information provided by ORS in connection with this docket. This includes all documents, electronic files or other attachments that were that were provided, or made available for on-site inspection. Please produce these at the same time they are provided to the requesting party, or if that is impossible, as soon as practicable thereafter.

**RESPONSE:**

1-3. Please produce copies of all data requests, requests for production, interrogatories, or any other request for information that ORS has served on other parties in connection with this docket. Please produce these at the same time they are served on the other party. Please consider this an ongoing request.

**RESPONSE:**

1-4. Please produce copies of the responses to all data requests, requests for production, interrogatories, or any other request for information that ORS has served on

other parties in connection with this docket. Please produce these as soon as practicable after they are received. Please consider this an ongoing request.

**RESPONSE:**

1-5. Please produce any and all documents identified, referred to, or relied upon in preparing your response to Duke Energy's First Set of Interrogatories to ORS.

**RESPONSE:**

**Mr. Phillip Hayet, J. Kennedy and Associates, Inc.**

1-6. Referring to the recommendation on Page 7 of Mr. Hayet's testimony that "the Companies could assume \$38/megawatt-hour ("MWh") as the solar PPA cost[.]" please provide native copies of all workpapers, input files, results files, spreadsheets, or other documents used in developing the \$38 MWh proposal.

**Mr. Lane Kollen, J. Kennedy and Associates, Inc.**

1-7. Referring to Mr. Kollen's statement beginning at Page 7, Line 2 of his testimony, please produce copies of any and all publications, studies, or other documents that Mr. Kollen consulted or otherwise believes supports his position that "[t]he Companies assumed capital cost for solar resources is higher than was found in other sources that were available and this may have affected the amount of solar selected economically had the cost been lower and more consistent with the other sources."

**RESPONSE:**

1-8. Referring to Mr. Kollen's testimony beginning at Page 9, Line 3, please provide copies of all workpapers, input files, results files, spreadsheets, or other documents related to the Minimax Regret Analysis ORS performed.

**RESPONSE:**

**Mr. Anthony Sandonato, South Carolina Office of Regulatory Staff**

1-9. Referring to Figure 3 on page 41 of Exhibit AMS-1, please provide copies of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 3.

**RESPONSE:**

1-10. Referring to Figure 3 on page 41 of Exhibit AMS-2, please provide copies of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 3.

**RESPONSE:**

1-11. Referring to Table 8 on page 40 of Exhibit AMS-1, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 8.

**RESPONSE:**

1-12. Referring to Table 8 on page 40 of Exhibit AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 8.

**RESPONSE:**

1-13. Referring to Table 10 on page 40 of Exhibit AMS-1 and Page 44 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 10.

**RESPONSE:**

1-14. Referring to Figure 4 on page 51 of Exhibit AMS-1 and Page 53 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 4.

**RESPONSE:**

1-15. Referring to Figure 5 on page 51 of Exhibit AMS-1 and Page 53 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 5.

**RESPONSE:**

1-16. Referring to Figure 6 on page 52 of Exhibit AMS-1 and Page 54 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 6.



**RESPONSE:**

1-17. Referring to Figure 7 on page 53 of Exhibit AMS-1 and Page 55 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 7.

**RESPONSE:**

1-18. Referring to Figure 8 on page 56 of Exhibit AMS-1, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 8.

**RESPONSE:**

1-19. Referring to Figure 9 on page 58 of Exhibit AMS-1 and Page 58 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 9.

**RESPONSE:**

1-20. Referring to Figure 10 on page 59 of Exhibit AMS-1 and Page 59 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 10.

**RESPONSE:**

1-21. Referring to Figure 11 on page 60 of Exhibit AMS-1 and Page 60 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Figure 11.

**RESPONSE:**

1-22. Referring to Table 14 on Pages 74-75 of Exhibit AMS-1 and Pages 75-76 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 14.

**RESPONSE:**

1-23. Referring to Table 16 on Page 82 of Exhibit AMS-1 and Page 83 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 16.

**RESPONSE:**

1-24. Referring to Table 17 on Page 83 of Exhibit AMS-1 and Page 84 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 17.

**RESPONSE:**

1-25. Referring to Table 18 on Page 91 of Exhibit AMS-1 and Page 92 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 18.

**RESPONSE:**

1-26. Referring to Table 19 on Page 91 of Exhibit AMS-1 and Page 93 of AMS-2, please provide native copies with formulas intact of all workpapers, input files, results files, spreadsheets, or other documents used in developing Table 19.

**RESPONSE:**

1-27. As provided in the instructions to these Requests, if a privilege or objection as to any Request is claimed, identify with specificity the matter as to which the privilege or objection is claimed, the nature of the privilege or objection, the legal and factual basis for each such claim, and a complete description of the information or document being withheld.

**RESPONSE:**

Dated this 23<sup>rd</sup> day of February 2021.

/s/Heather Shirley Smith

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